

TAYLORVILLE WATER QUALITY REPORT

For the period of January 1 to December 31, 2012

We are happy to report that we had no violations in the past year.

This report summarizes the quality of water that we provided last year, including details about where your water comes from, what it contains, and how it compares to standards set by regulatory agencies. We are committed to providing you with information because informed customers are our best allies.

If you have any questions concerning your water system or this report, please contact the Water Superintendent, David Speagle at 217-287-1441. We want our valued customers to be informed about their water quality. If you would like to learn more, please feel welcome to attend any of our regularly scheduled Water Committee meetings held on the second Thursday of each month at 6:00P.M. in the City Council chambers located on the second floor of the Taylorville Municipal Building at 115 N. Main St.

Our town uses groundwater provided by four wells in the Macon-Christian aquifer. An aquifer is a geological formation that contains water. We also acquire water from Lake Taylorville. Water is pumped from both locations, blended together and then processed through a lime softening/clarification treatment plant.

Illinois EPA considers all surface water sources of public water supply to be susceptible to potential pollution problems. Hence the reason for mandatory treatment of all public water supplies in Illinois. Mandatory treatment includes coagulation, sedimentation, filtration and disinfection. Primary sources of pollution in Illinois lakes can include agricultural runoff, land disposal (septic systems) and shoreline erosion.

The source water assessment shows the location of the Taylorville community water wells and the Minimum Setback Zones associated with each well and the delineated 5-Year Recharge Area. In addition, any potential sources of contamination located near the wells are also displayed. Due to the geologic sensitivity of the well, monitoring results indicating elevated nitrates and agricultural land use activities within the recharge area, Illinois EPA considers these wells to be susceptible to VOC (Volatile Organic Chemicals), SOC (Synthetic Organic Chemicals) and IOC (Inorganic Chemicals). A complete source water assessment is available upon request. If you would like a copy, please contact the Water Treatment Plant at 217-287-1441.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people who have HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. USEPA/CDC (United States Environmental Protection Agency, Center for Disease Control) guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbial contaminants are available from the USEPA's Safe Drinking Water Hotline (1-800-426-4791).

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. We cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the USEPA's Safe Drinking Water Hotline (1-800-426-4791).

Our supply does not currently have any waivers, nor do we have plans on applying for any. If a supply has a favorable monitoring history they may apply for a vulnerability waiver and reduced sampling. The reason some suppliers opt for this is the reduced sampling costs. The sources of drinking water (both tap and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs and wells. As water travels over the surface of the land or through the ground, it can dissolve naturally occurring minerals and radioactive material, and can pick up substances resulting from the presence of animals or from human activity. Possible contaminants consist of:

Microbial Contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.

Inorganic Contaminants, such as salts and metals, which can be naturally occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oils and gas production, mining or farming.

Pesticides and Herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff and residential uses.

Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff and septic systems.

Radioactive Contaminants, which may be naturally occurring or the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, USEPA prescribes regulations that limit the amount of certain contaminants in water provided by public water supply systems. FDA regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

In addition to the informational section of this Water Quality Report, we have included for your review several tables. The tables will give you a better picture of the contaminants that were detected in your water and the contaminants that were tested for but not detected.

2012 City of Taylorville Water Quality Report

Definition of Terms:

Maximum Contaminant Level Goal (MCLG): The level of contaminant in drinking water below which there is no expected risk to health. MCLG's allow for a margin of safety.

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLG's as feasible using the best available treatment technology.

Level Found: This column represents an average of sample result data collected during the CCR calendar year. In some cases, it may represent a single sample if only one sample was collected.

Range of Detections: This column represents a range of individual sample results, from lowest to highest that were collected during the CCR calendar year.

Date of Sample: If a date appears in the column, the Illinois EPA requires monitoring for this contaminant less than once per year because the concentrations do not frequently change. If no date appears in the column, monitoring for this contaminant was conducted during the CCR calendar year.

Action Level (AL): The concentration of contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water.

n/a: Not applicable

n/d: Not detectable at testing limits

Regulated Contaminants Detected in 2012 (collected in 2012 unless noted)

Lead and Copper Definitions: Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow. Action Level Goal (ALG): The level of a contaminant in drinking water below which there is no known or expected risk to health. ALG's allow for a margin of safety.								
Lead and copper	Date sampled	MCLG	Action Level (AL)	90th Percentile	# Sites over AL	Units	Violation	Likely Source of Contaminant
Lead	July 2011	ppb	15	0	0	ppb	No	Corrosion of household plumbing systems, Erosion of natural deposits

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. We cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>.

Water Quality Test Results

Maximum Contaminant Level Goal (MCLG): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLG's allow for a margin of safety.

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLGs as feasible using the best available treatment technology.

Maximum Residual Disinfectant Level Goal (MRDLG): The level of a drinking water disinfectant below which there are no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

Maximum Residual Disinfectant Level (MRDL): The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Definitions: The following tables contain scientific terms and measures, some of which may require explanation.

ug/l or ppb: micrograms per liter or parts per billion - or one ounce in 7,350,000 gallons of water.

Na: not applicable

Avg: Regulatory compliance with some **MCL's** are based on running annual average of monthly samples.

mg/l or ppm: milligrams per liter or parts per million - or one ounce in 7,350 gallons of water.

Disinfectants & Disinfection By-products	Collection Date	Highest Level	Range of Levels	MCLG	MCL	Units	Violation	Likely Source of Contaminants
Disinfectants & Disinfection By-Products								
Chlorine	01/01/2012	2.39	1.38-2.39	MRDLG =4	MRDL= 4	ppm	No	Water additive used to control microbes
Total Haloacetic Acids (HAAS)	04/23/2012	23.1	1.1-23.1	N/A	60	ppb	No	By-product of drinking water chlorination
TTHMs Total TRIHALOMETHANES	09/05/2012	74.8	25.8-74.8	N/A	80	ppb	No	By-product of drinking water chlorination
Inorganic Contaminants								
Barium	05/07/2012	0.089	0.0157 0.0157	2	2	ppb	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Fluoride	05/04/2012	1.05	0.90-1.05	4	4	ppm	No	Erosion of natural deposits; Water additive which promotes strong teeth; Fertilizer discharge
Nitrate (As N)	05/07/2012	6.78	4.7-6.78	10	10	ppm	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Sodium	08/07/2012	110	20.7-110	N/A	N/A	ppm	No	Erosion of naturally occurring deposits; used in water softener regeneration.
Zinc	08/07/2012	0.02	0.02	5	5	ppm	No	Naturally occurring; discharge from metal factories

There is not a state or federal M.C.L. for sodium. Monitoring is required to provide information to consumers and health officials that are concerned about sodium intake due to dietary precautions. If you are on a sodium-restricted diet, you should consult a physician about this level of sodium in the water.

Note: The state requires monitoring of certain contaminants less than once per year because the concentrations of these contaminants do not change frequently. Therefore, some of this data may be more than one year old.

Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant, you should ask for advice from your health care provider.

Turbidity	Limit (Treatment Technique)	Level Detected	Violation	Likely Source of Contamination
Highest single measurement	1 NTU	0.457 NTU	No	Soil runoff.
Lowest monthly % meeting limit	0.3 NTU	97%	No	Soil runoff.

Information Statement: Turbidity is a measurement of the cloudiness of the water caused by suspended particles. We monitor it because it is a good indicator of water quality and the effectiveness of our filtration system and disinfectants.

Total Organic Carbon

The percentage of Total Organic Carbon (TOC) removal was measured each month and the system met all TOC removal requirements set by IEPA, unless a TOC violation is noted in the violations section.

Cryptosporidium samples were taken from the Raw water on a monthly basis with detects occurring in February and March 2009 of 0.1 oocysts per Liter, in May with detects of 0.3 oocysts per Liter, in November 2009 with detects of 0.370 oocysts per Liter and in December 2009 with a detect of 0.2 oocysts per Liter.

Cryptosporidium is a microbial parasite found in surface water throughout the U.S. Although filtration removes cryptosporidium, the most commonly used filtration methods cannot guarantee 100 percent removal. Our monitoring of source water and/or finished water indicate the presence of these organisms. Current test methods do not enable us to determine if the organisms are dead or if they are capable of causing disease. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Most healthy individuals can overcome the disease within a few weeks. However, immuno-compromised people are at greater risk of developing life-threatening illness.

Immuno-compromised individuals are encouraged to consult their doctors regarding appropriate precautions to avoid infection. Cryptosporidium must be ingested to cause disease and it may be spread through means other than drinking water.